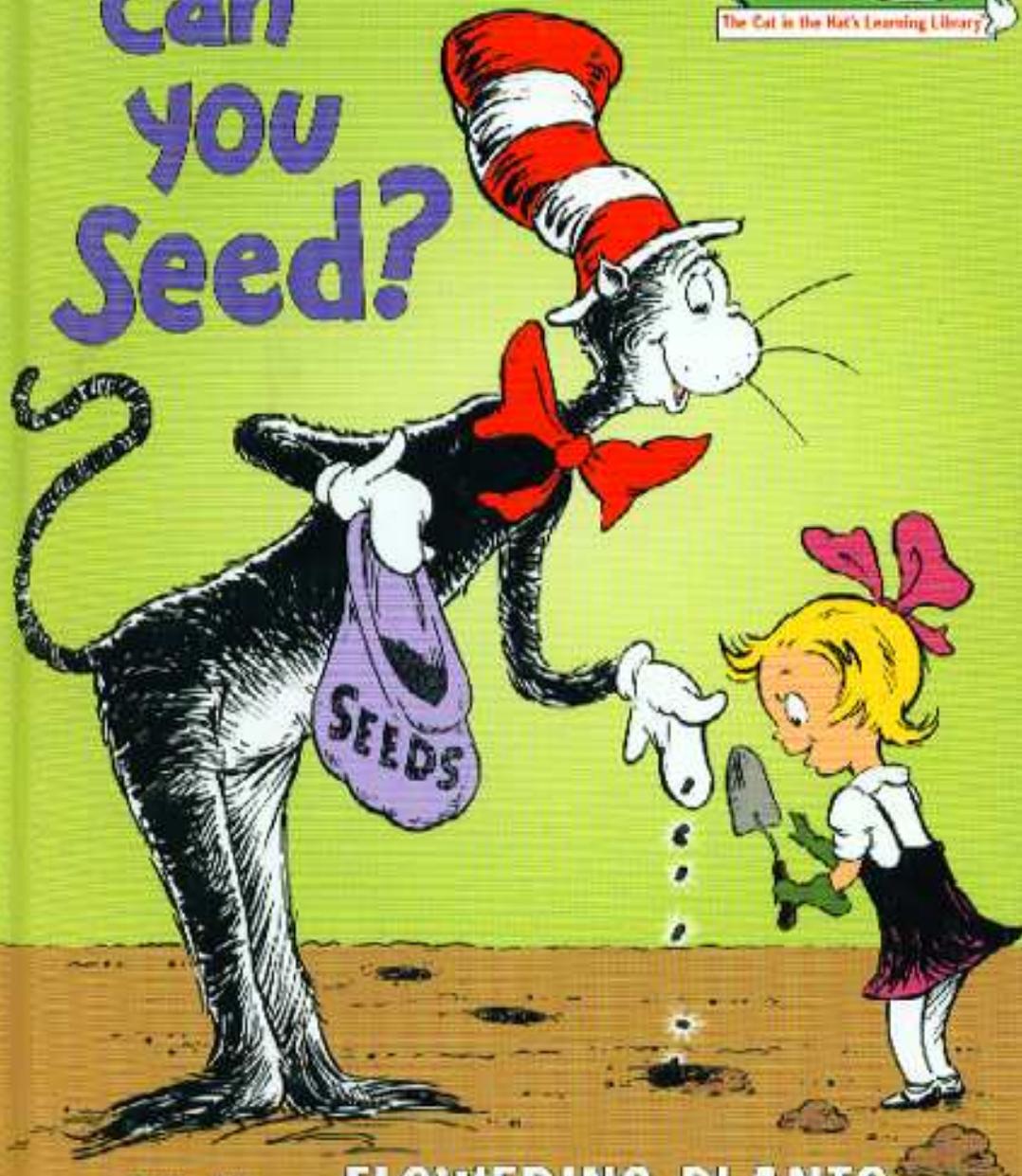


Oh say can you Seed?



All About **FLOWERING PLANTS**

by Bonnie Worth • illustrated by Aristides Ruiz

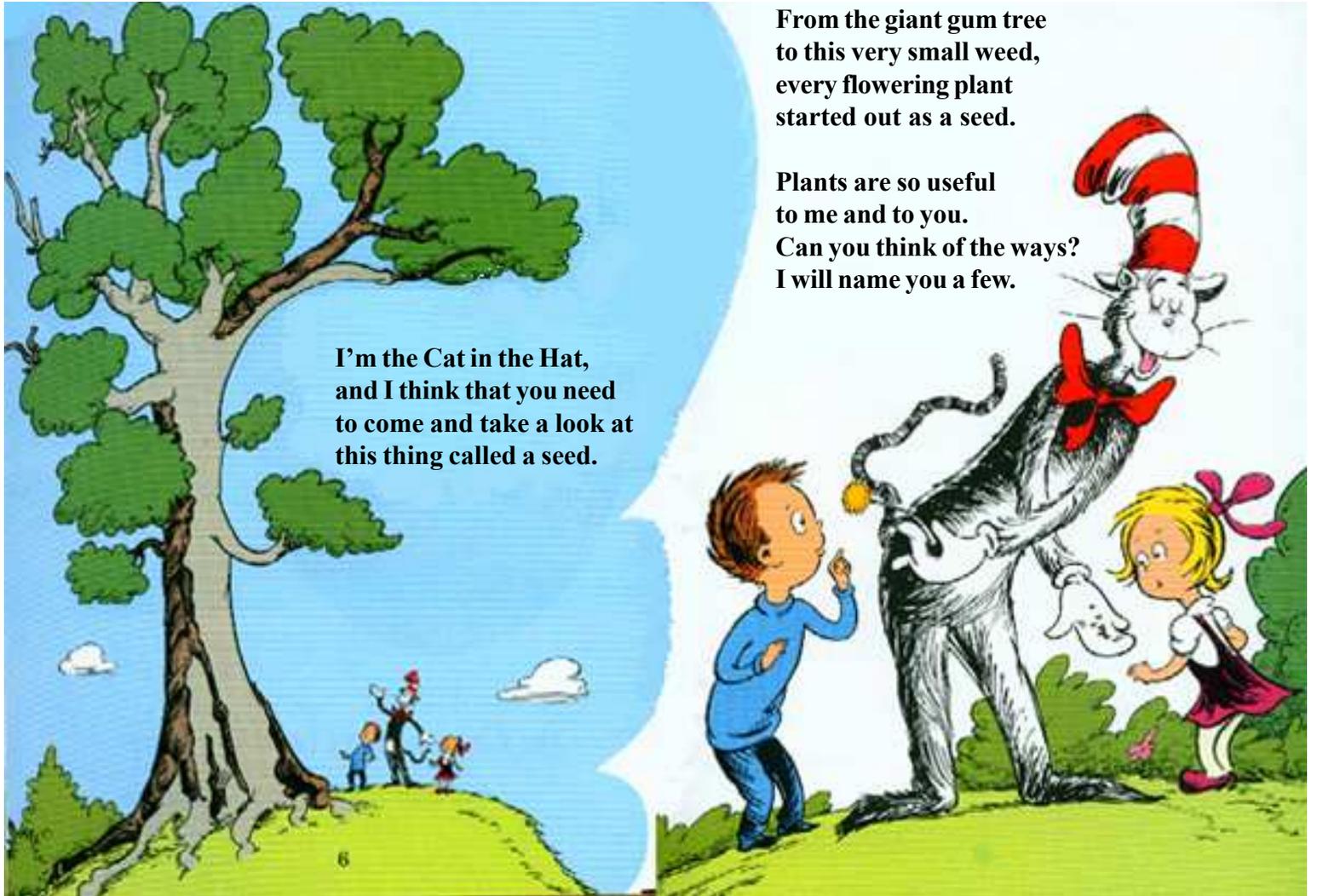
Oh
say
can
you
Seed?



OH SAY CAN YOU SEED?

All about FLOWERING PLANTS

By **Bonnie Worth** – Illustrated by **Aristides Ruiz**



**I'm the Cat in the Hat,
and I think that you need
to come and take a look at
this thing called a seed.**

**From the giant gum tree
to this very small weed,
every flowering plant
started out as a seed.**

**Plants are so useful
to me and to you.
Can you think of the ways?
I will name you a few.**

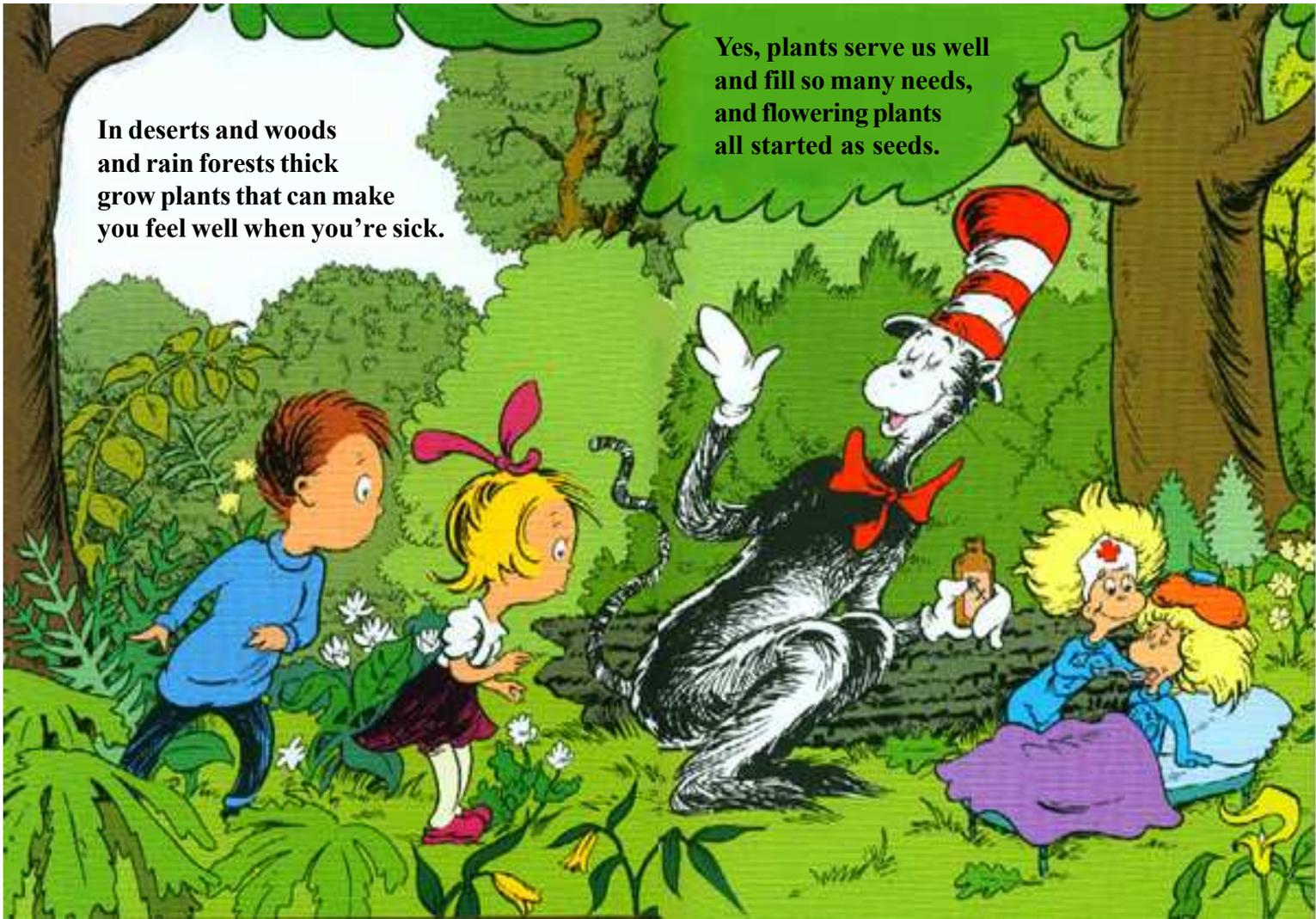
**The paper from books and
the cloth for your pants
came from trees and from cotton –
that’s two kinds of plants.**

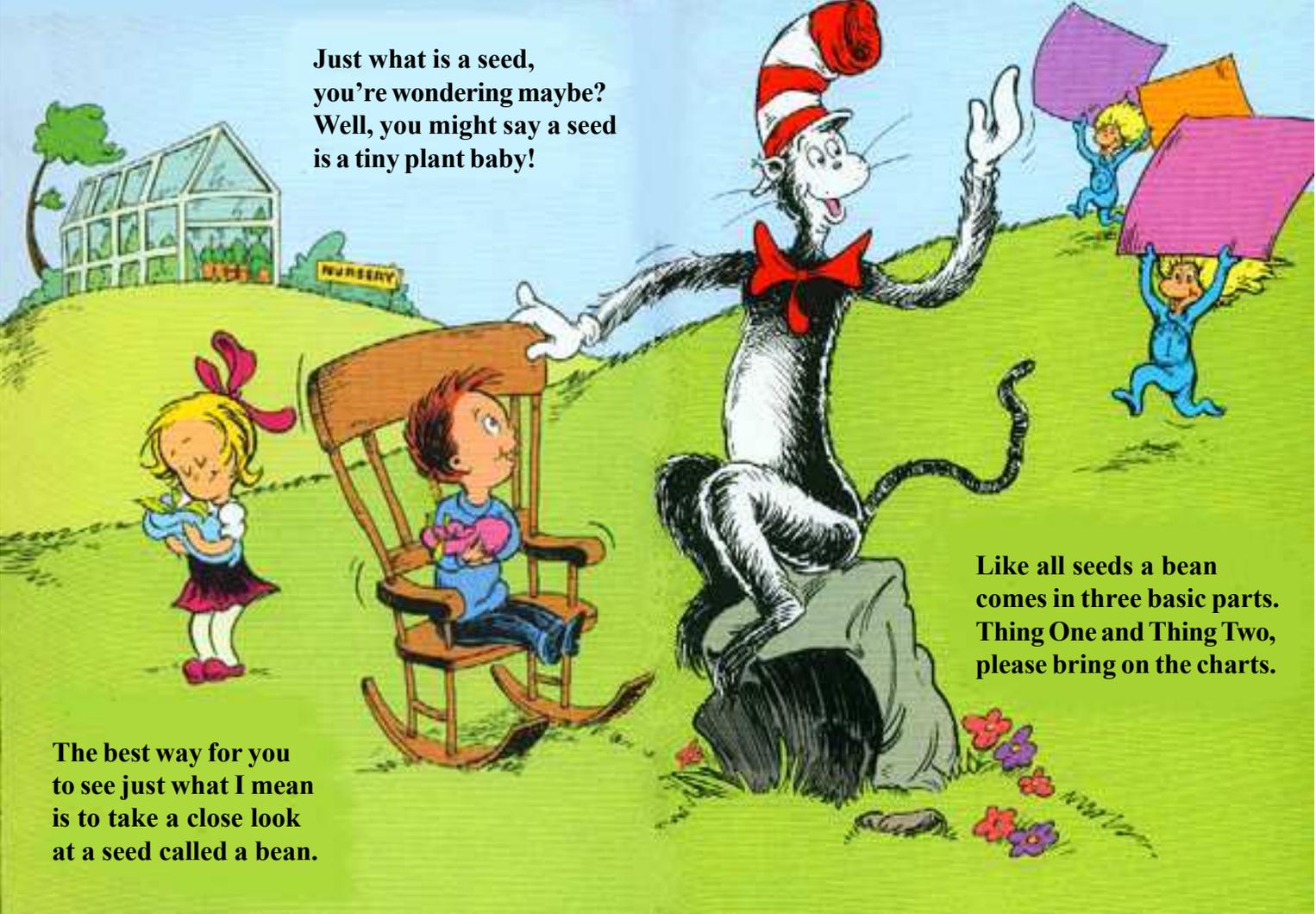
**The grains and the fruits
and the veggies, you eat –
why, they come from plants, too.
And here’s something neat...**



**In deserts and woods
and rain forests thick
grow plants that can make
you feel well when you're sick.**

**Yes, plants serve us well
and fill so many needs,
and flowering plants
all started as seeds.**





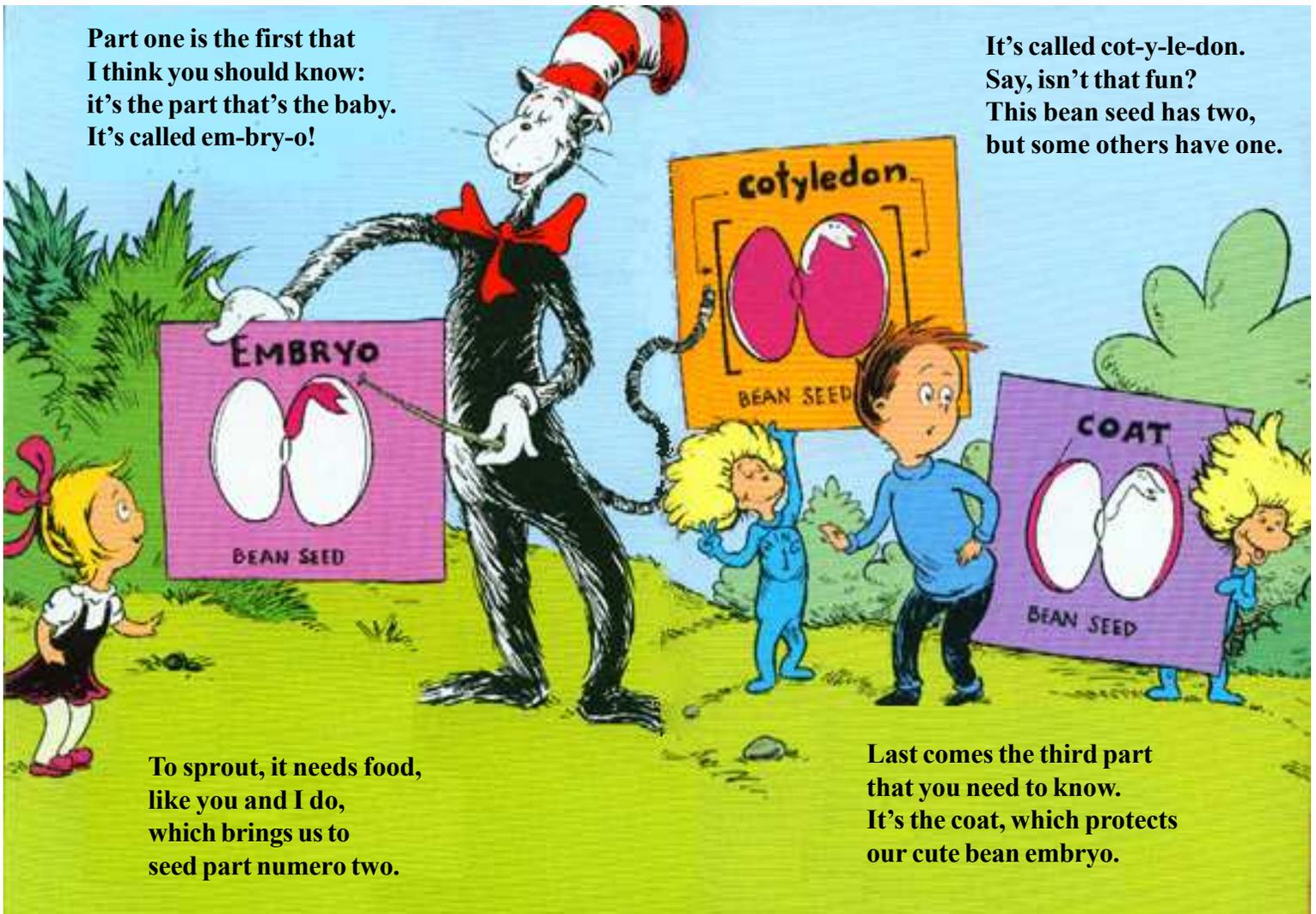
**Just what is a seed,
you're wondering maybe?
Well, you might say a seed
is a tiny plant baby!**

**Like all seeds a bean
comes in three basic parts.
Thing One and Thing Two,
please bring on the charts.**

**The best way for you
to see just what I mean
is to take a close look
at a seed called a bean.**

Part one is the first that
I think you should know:
it's the part that's the baby.
It's called em-bry-o!

It's called cot-y-le-don.
Say, isn't that fun?
This bean seed has two,
but some others have one.



To sprout, it needs food,
like you and I do,
which brings us to
seed part numero two.

Last comes the third part
that you need to know.
It's the coat, which protects
our cute bean embryo.

To sprout a bean seed,
keep it moist, but not wet.

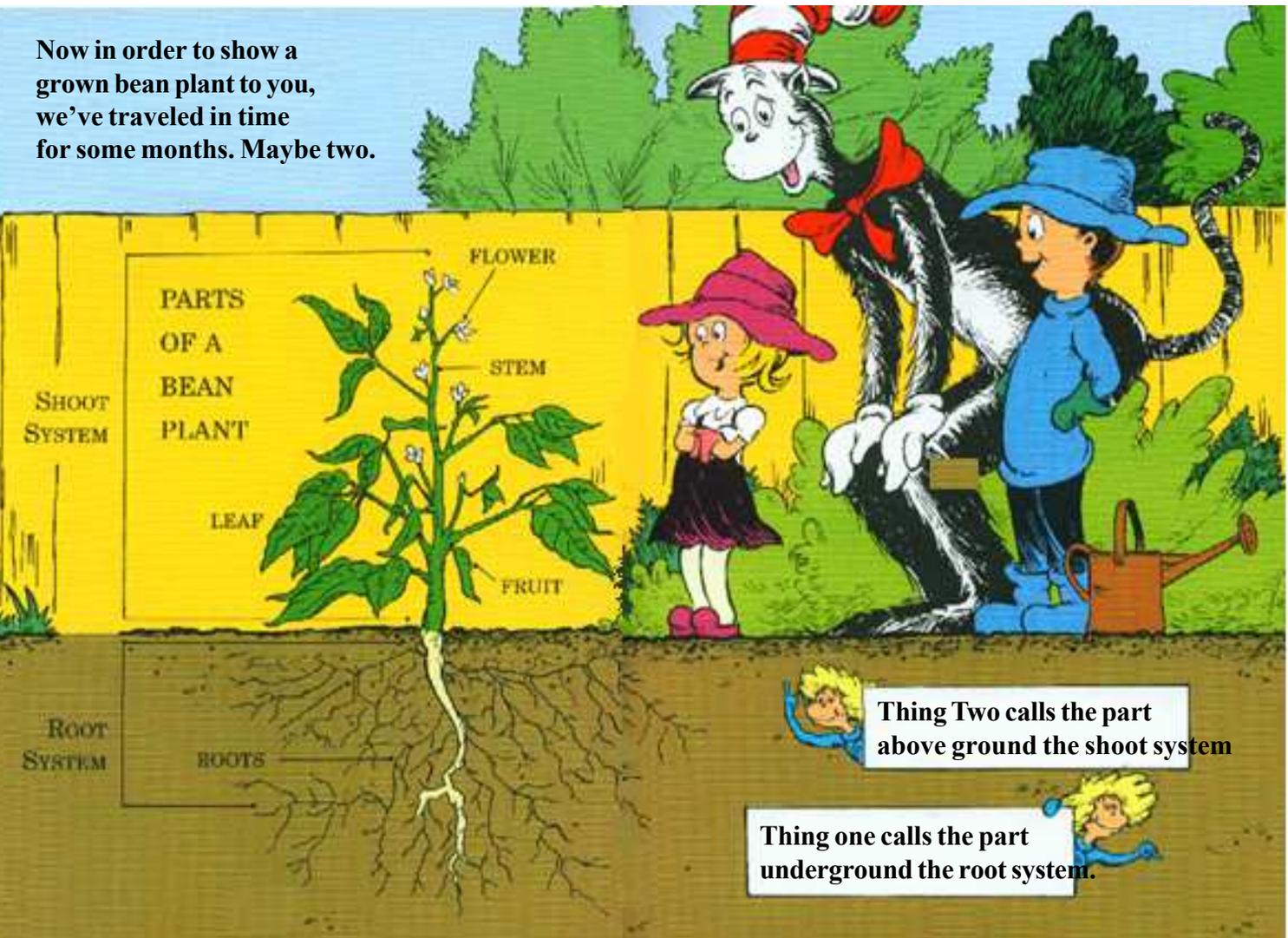
In seven or so days
comes the part that I love:

Keep it covered with dirt
and then see what you get.

a root spreads below
and a stem shoots above.



Now in order to show a grown bean plant to you, we've traveled in time for some months. Maybe two.



Thing Two calls the part above ground the shoot system

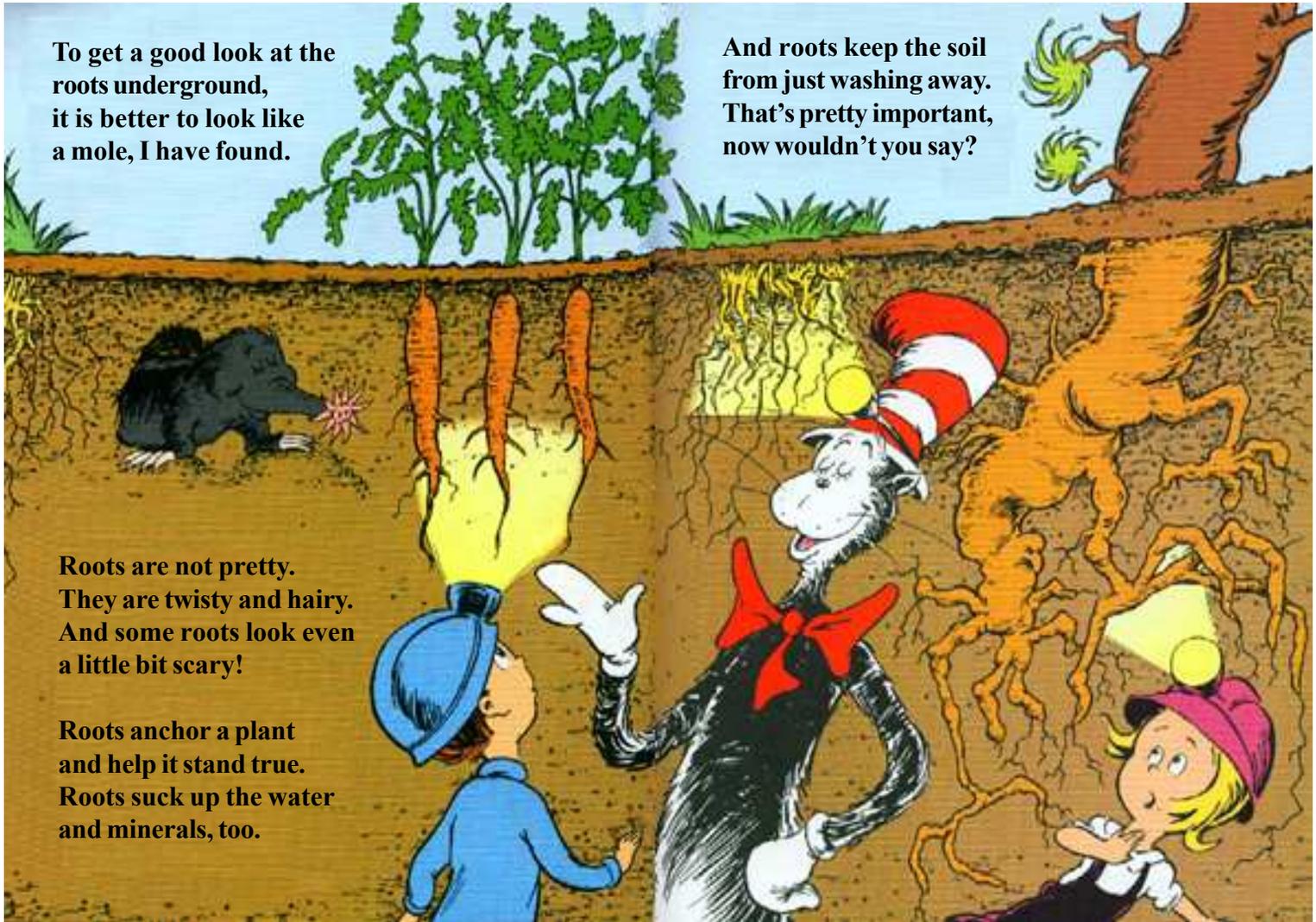
Thing one calls the part underground the root system.

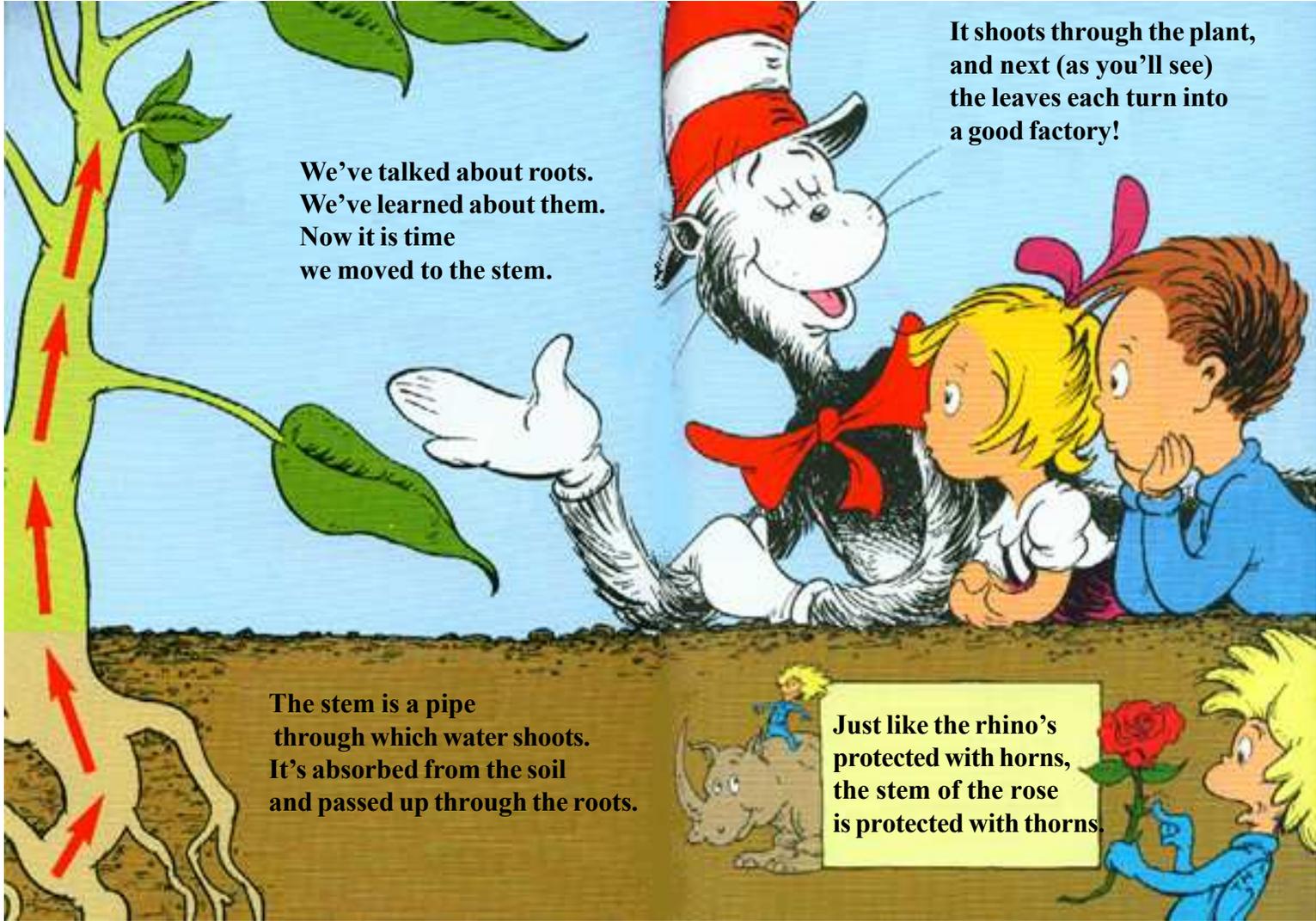
To get a good look at the roots underground, it is better to look like a mole, I have found.

And roots keep the soil from just washing away. That's pretty important, now wouldn't you say?

Roots are not pretty. They are twisty and hairy. And some roots look even a little bit scary!

Roots anchor a plant and help it stand true. Roots suck up the water and minerals, too.





We've talked about roots.
We've learned about them.
Now it is time
we moved to the stem.

It shoots through the plant,
and next (as you'll see)
the leaves each turn into
a good factory!

The stem is a pipe
through which water shoots.
It's absorbed from the soil
and passed up through the roots.

Just like the rhino's
protected with horns,
the stem of the rose
is protected with thorns.

Leaves come in all shapes and all sizes, I've found – some small and some spiky, some big and some round.



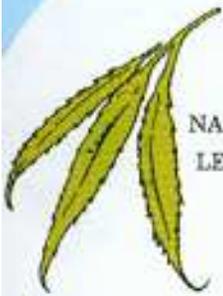
SMOOTH EDGES



LOBED EDGES

But the thing that all leaves have in common is this: they make their own food by pho-to-syn-the-sis.

I'll say this quite loudly – I don't mean to be rude – but...



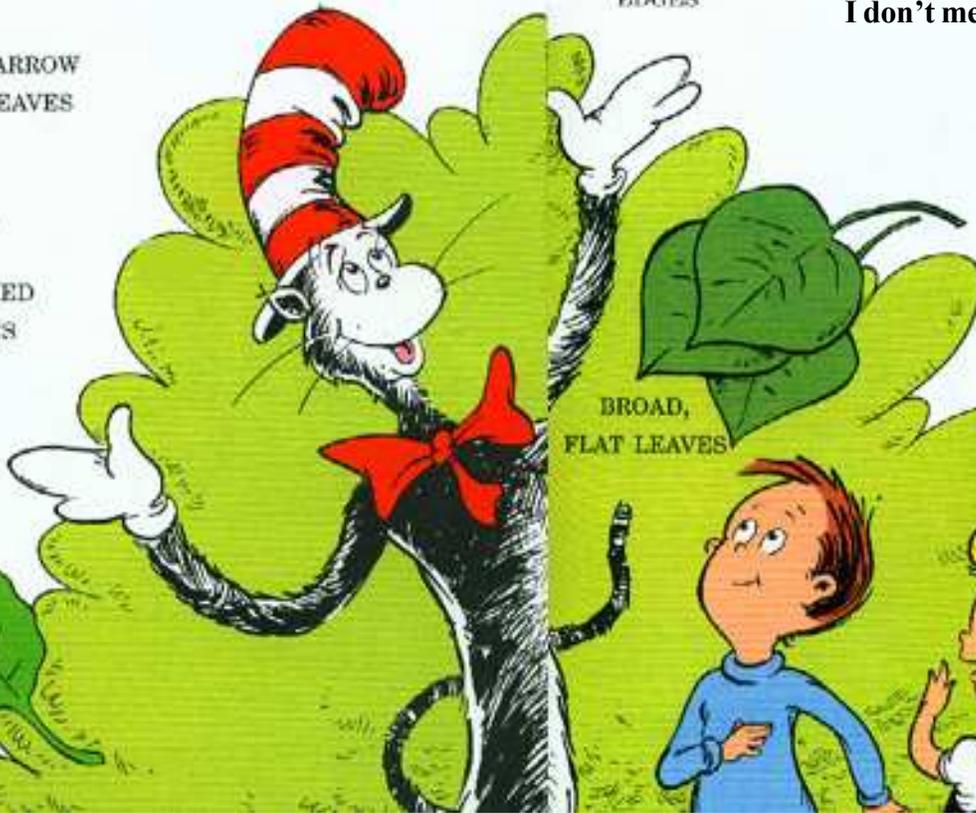
NARROW LEAVES



TOOTHED EDGES



WAVY EDGES



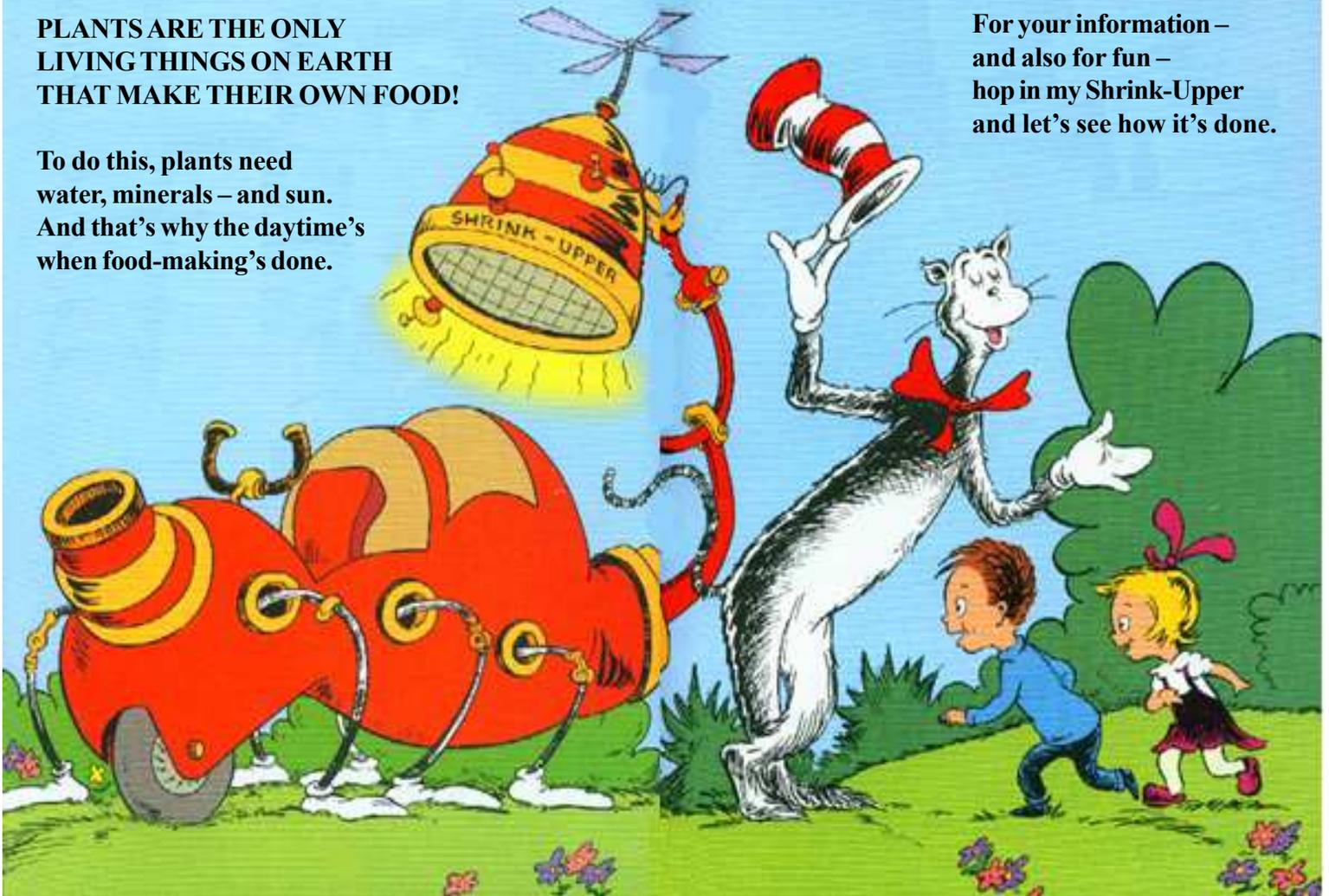
BROAD, FLAT LEAVES



**PLANTS ARE THE ONLY
LIVING THINGS ON EARTH
THAT MAKE THEIR OWN FOOD!**

**To do this, plants need
water, minerals – and sun.
And that's why the daytime's
when food-making's done.**

**For your information –
and also for fun –
hop in my Shrink-Upper
and let's see how it's done.**

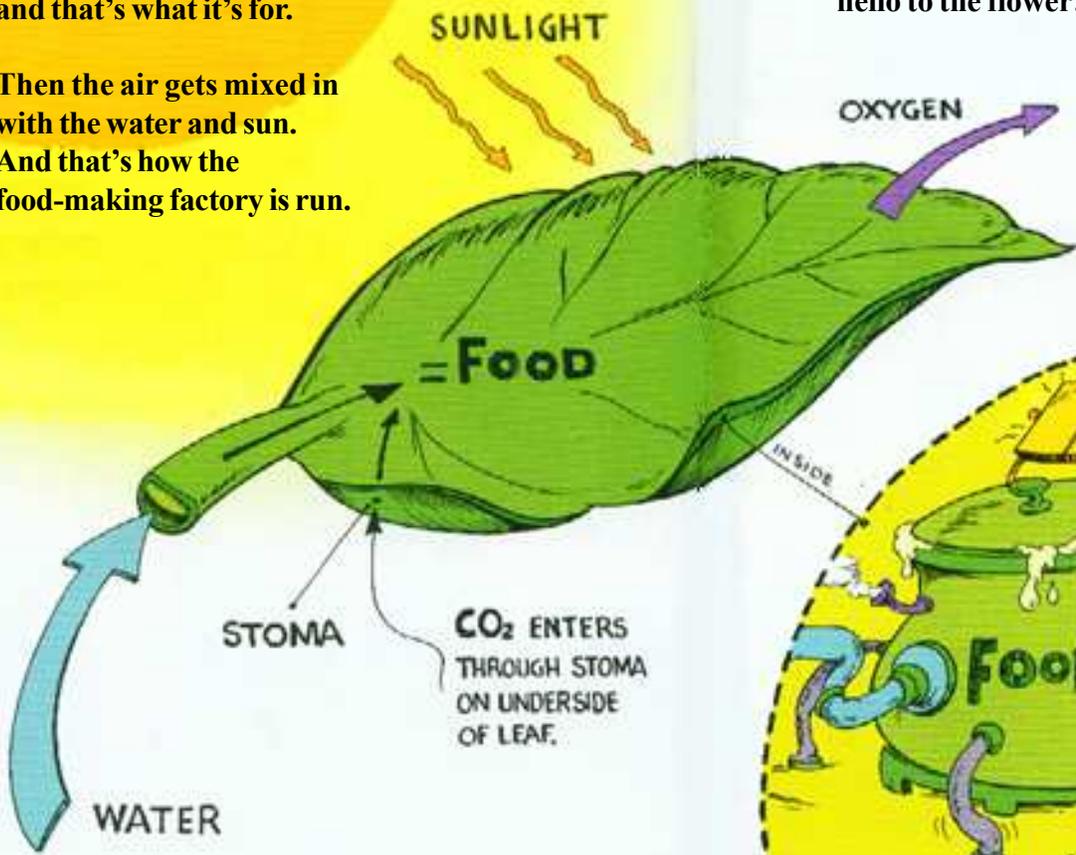


The leaves take the CO_2 through a stoma, or pore. It works like a mouth, and that's what it's for.

Then the air gets mixed in with the water and sun. And that's how the food-making factory is run.

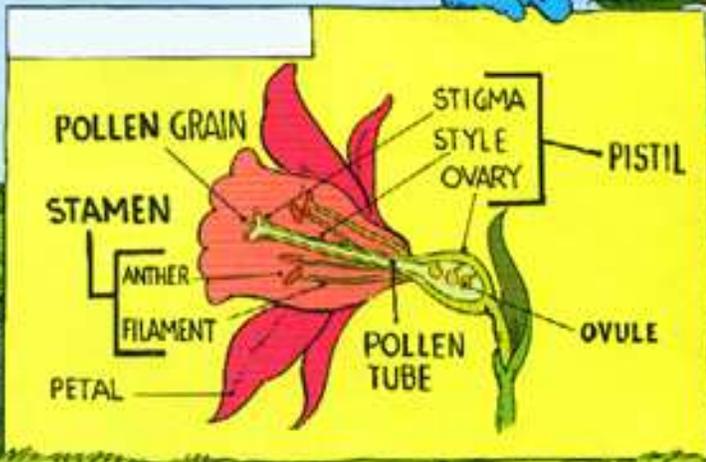
I see by my clock that now is the hour to drop in and say a hello to the flower!

Plants breathe out a gas that we breathe in. The name of that gas is OX-Y-GEN



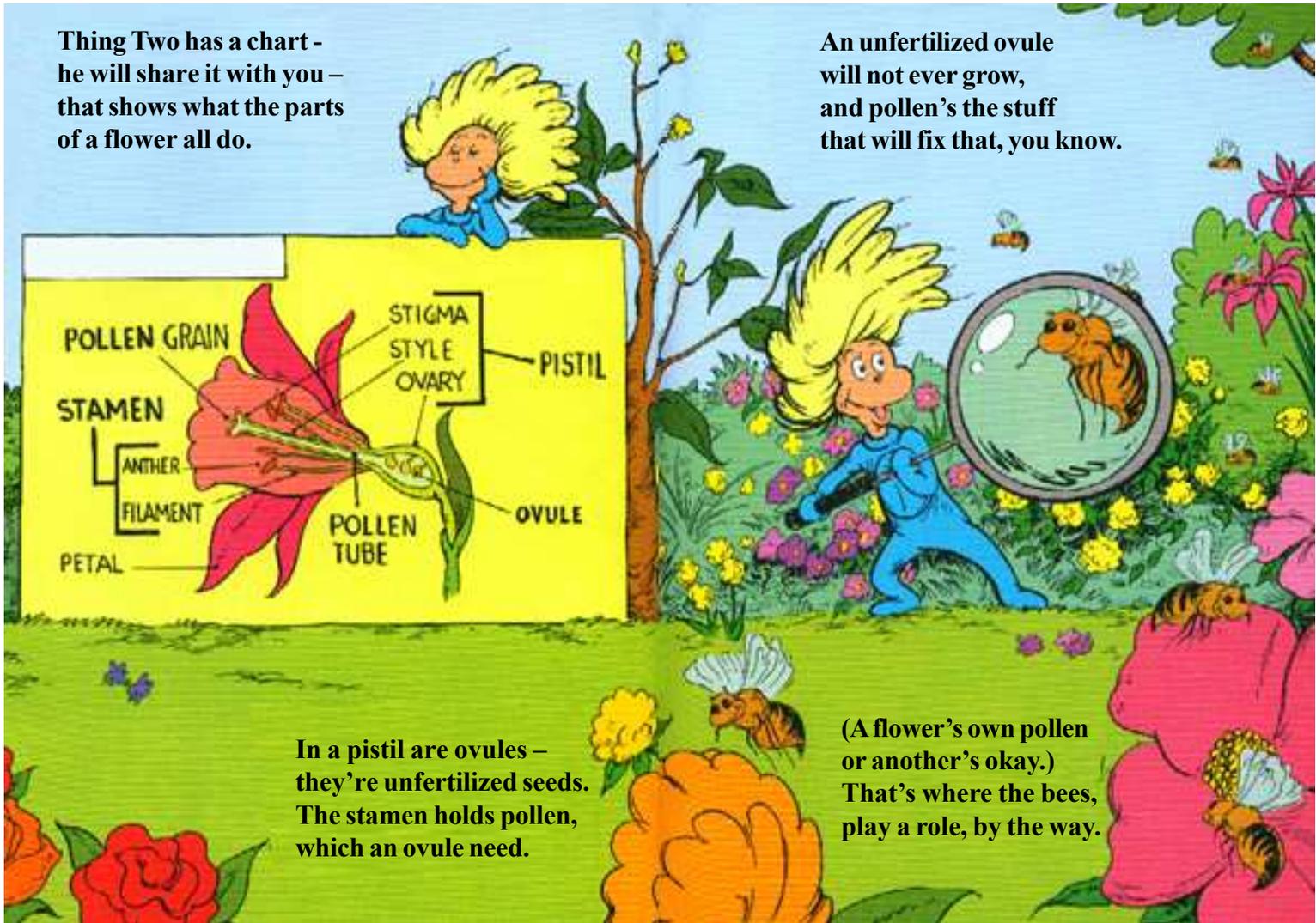
**Thing Two has a chart -
he will share it with you -
that shows what the parts
of a flower all do.**

**An unfertilized ovule
will not ever grow,
and pollen's the stuff
that will fix that, you know.**



**In a pistil are ovules -
they're unfertilized seeds.
The stamen holds pollen,
which an ovule need.**

**(A flower's own pollen
or another's okay.)
That's where the bees,
play a role, by the way.**



To make honey, bees need to get nectar from flowers. They fly and they gather this sweet stuff for hours.

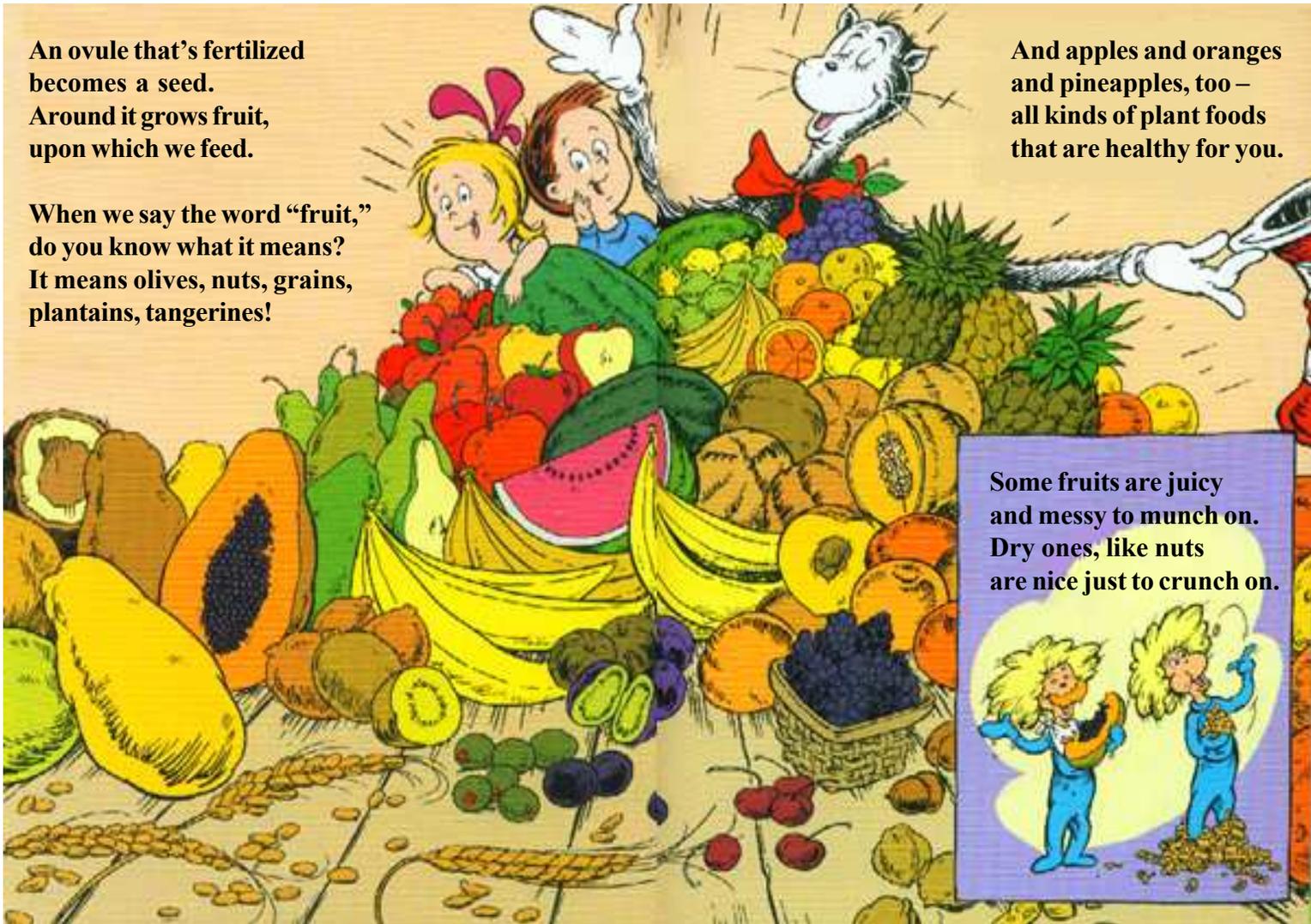
The pollen sticks into their bodies and legs. It falls off and, sometimes, it reaches the eggs!



**An ovule that's fertilized
becomes a seed.
Around it grows fruit,
upon which we feed.**

**When we say the word "fruit,"
do you know what it means?
It means olives, nuts, grains,
plantains, tangerines!**

**And apples and oranges
and pineapples, too –
all kinds of plant foods
that are healthy for you.**



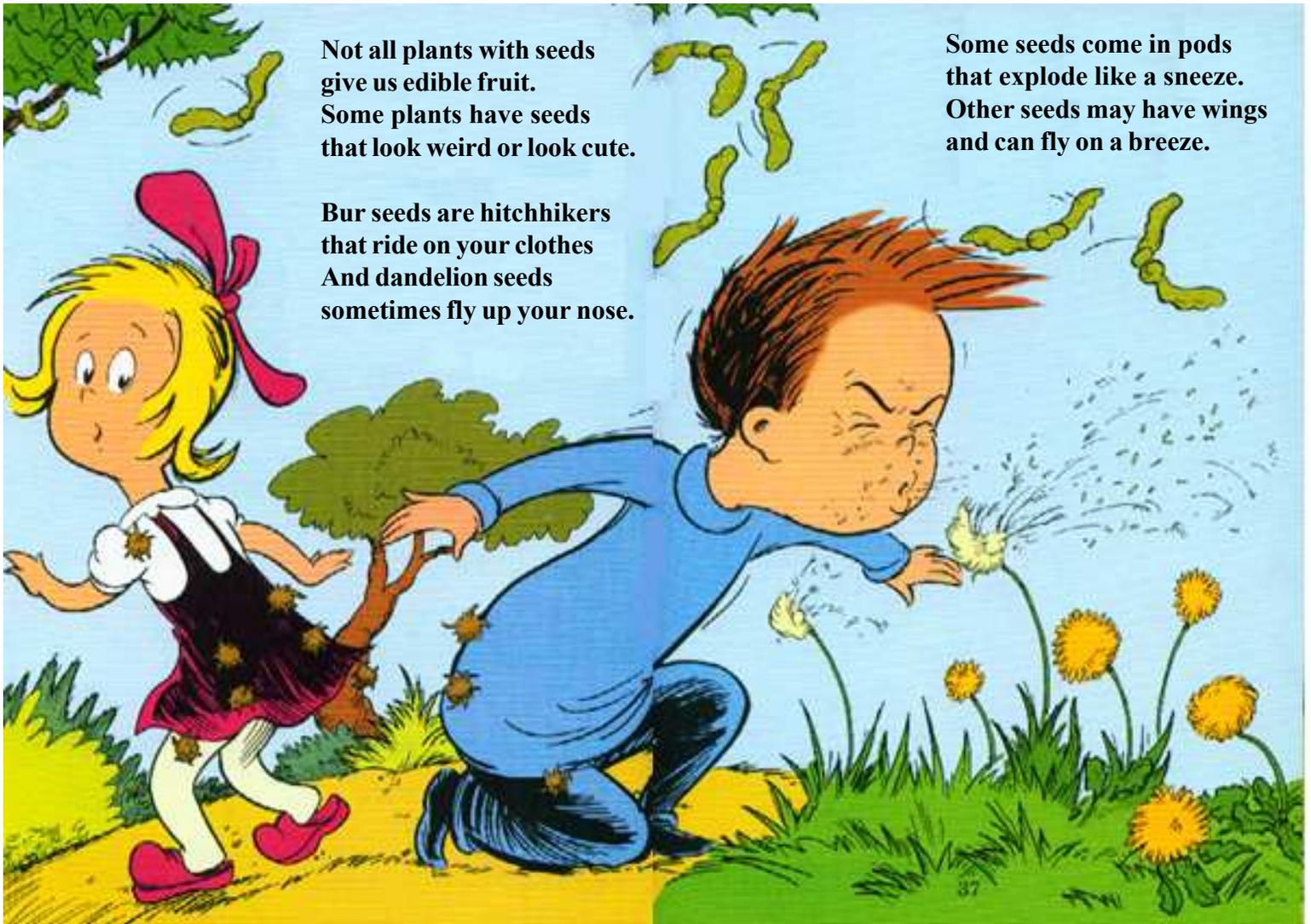
**Some fruits are juicy
and messy to munch on.
Dry ones, like nuts
are nice just to crunch on.**

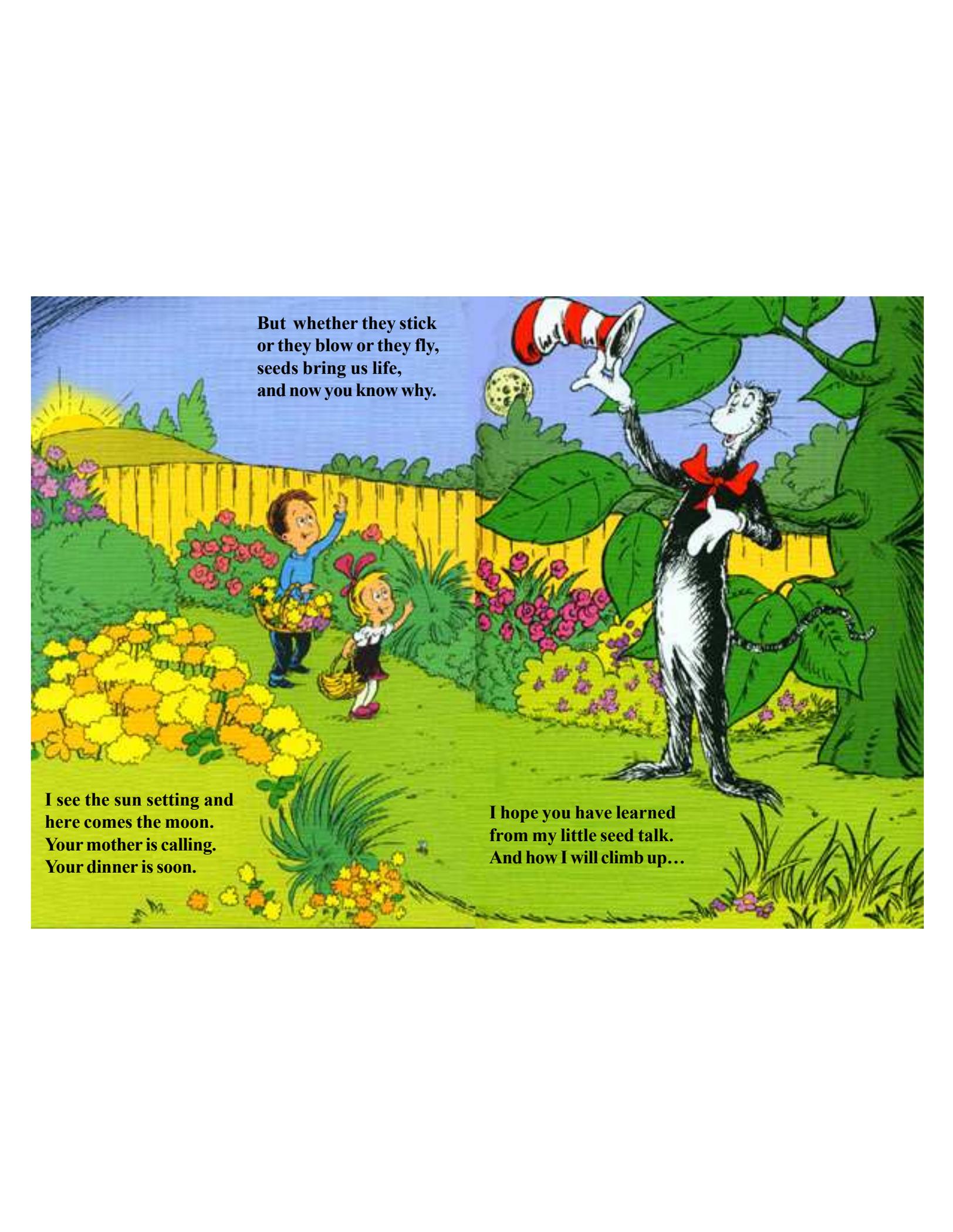


**Not all plants with seeds
give us edible fruit.
Some plants have seeds
that look weird or look cute.**

**Bur seeds are hitchhikers
that ride on your clothes
And dandelion seeds
sometimes fly up your nose.**

**Some seeds come in pods
that explode like a sneeze.
Other seeds may have wings
and can fly on a breeze.**





**But whether they stick
or they blow or they fly,
seeds bring us life,
and now you know why.**

**I see the sun setting and
here comes the moon.
Your mother is calling,
Your dinner is soon.**

**I hope you have learned
from my little seed talk.
And how I will climb up...**

...this giant beanstalk!

